

### REMARKS

Claims 1-9 are pending. No claims are amended. Entry of the amendment is proper, because it clarifies the Examiner's errors for Appeal.

Applicant is baffled by, and traverses, the Section 112 rejection that a constriction fails to support "having a diameter less than that of the portions of the nanofiber preceding and following the joint." The specification actually says: "The nanofiber may also be formed with a joint portion shaped like a constriction where the diameter is smaller." *Applicant's published application* at para. [0019] (emphasis added). Moreover, the discussion regarding Fig. 4, which visibly shows a constriction, similarly states that "[w]hen the heating is interrupted by the heat releasing period, the diameter of silicon nanofiber 4 will be configured with small joint." *Id.* at para. [0053]. Claim 3 is supported by the specification, the figures, and the ordinary meaning of "constriction." Applicant respectfully submits that the rejection is improper.

Applicant also traverses the Section 112 rejection relating to grain size. The specification directly contradicts the Examiner's interpretation that grain size relates to wire size:

For example, the size of silicon microcrystal grain 2 and the diameter of silicon nanofiber 4 become nearly equal and the cross-sectional configuration of silicon nanofiber 4 easily approximates the cross-sectional configuration of silicon microcrystal grain 2. Incidentally, the number of silicon nanowires 5 per unit cross sectional area comprising silicon nanofiber 4 normally depends on temperature and is not influenced by the size of silicon microcrystal grain 2 or the diameter of silicon nanofiber 4.

*Id.* at para. [0036] (emphasis added). Claim 5 is supported by the specification, and Applicant submits that the rejection is improper.

The anticipation rejection based on Westwater is traversed. Applicant alleges the following errors. First, as applied to Claims 2 and 3, the Examiner attempts to use a "joint" (and Applicant assumes that it one is only for the sake of argument) in a *particular nanowire*

(Westwater's Fig. 3) to meet limitations of a joint in a nanofiber. This is not supportable. As to Claims 4 and 6-9, they are patentable if the base claim is patentable.

Regarding the application of Westwater to Claim 1, Applicant notes that there is no teaching of a "stem shaped cross-sectional configuration." The cited Figs. 1C and 3 depict nanowires (13):

FIG. 1C

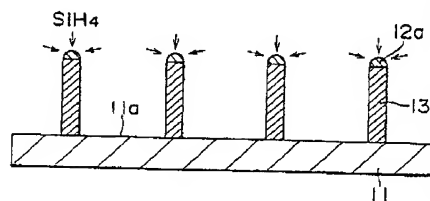
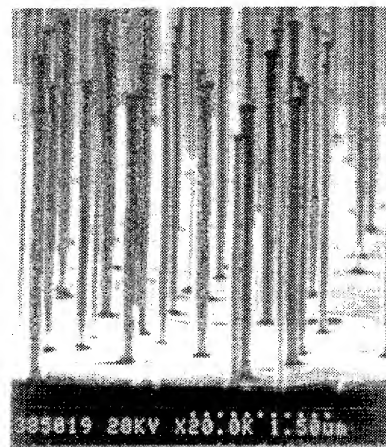


FIG. 3



In stark contrast, Applicant's Fig. 1C shows nanofibers (4), each having a stem shaped bundle of nanowires (5):

Fig. 1c

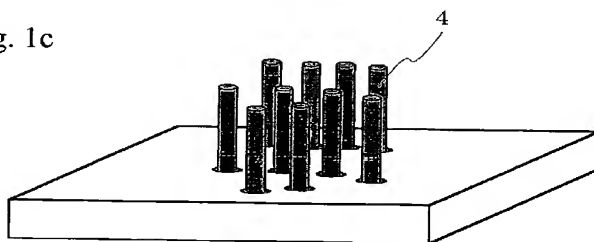
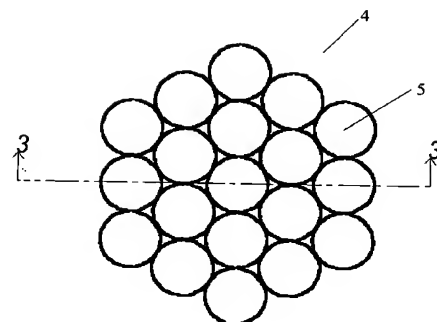


Fig. 2



Thus, the Examiner has failed to establish a *prima facie* case of anticipation by failing to teach all limitations of the claims.

Applicant traverses the anticipation rejection based on Okajima as well. Again, there is no teaching of a "stem shaped cross-sectional configuration." The cited Fig. 1(b) of

Okajima contains needles and no disclosure regarding their cross-sectional configuration.

A proper rejection must provide evidence that all claim limitations are met. Moreover, as the Examiner knows, he must show that his interpretation is more likely than not in order to establish a *prima facie* showing. In view of Westwater's Fig. 1c, **it is just as likely that Okajima's needle structures are nanowires** as opposed to nanofibers with a stem shaped cross-sectional configuration, if not more so. Thus, no preponderance of evidence has been shown.

Similarly, the Examiner's position that a tapering upward (Fig. 1b) meets Claim 2's limitation of a joint fails to give a proper interpretation of joint in light of the Applicant's specification.

If the Examiner has any questions before allowing the claims, he is invited to call the undersigned.

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